REMARKS

Claims 1-34 remain in this application, with Claims 1, 14, 27, 31, 32, 33 and 34 being in independent form. By the present amendment, Claims 1, 6, 12, 14, 19, 25, 27 and 30-34 have been amended and Claims 10 and 23 have been cancelled. Adequate support for the amendments is provided in the specification and in the figures. No new matter or issues are believed to be introduced by the amendments.

In the Office Action mailed on September 30, 2004, the Examiner correctly stated that IDS failed to comply with 37 CFR 1.98(a)(2) for failing to provide a legible copy of the listed patent EP 1354291 A2. WO 02/063543 A2, which is the equivalent of EP1354291 A2, is submitted herewith.

Claims 1-34 were rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 6,249,008, issued to Bunte et al., ("Bunte et al."). Applicants have amended independent Claims 1, 14, 27, 31, 32, 33 and 34 to better define Applicants' invention and to patentably distinguish over the disclosures of Bunte. Claims 10 and 23 have been cancelled.

It is Applicants' belief that independent Claims 1, 14, 27, 31, 32, 33 and 34 as presented patentably distinguish Applicants' invention over the disclosure of Bunte et al., taken alone or in any proper combination. In particular, Applicants' Claims 1, 14, 27, 31, 32, 33 and 34 recite functionally different systems, computer-readable medium and method than what is disclosed by Bunte et al., as emphasized by the portions underlined below. Hence, the subject matter of Claims 1, 14, 27, 31, 32, 33 and 34 is not deemed obvious over the disclosure of Bunte et al.

Applicants' Claim 1 recites:

A method for imaging an optical code comprising the steps of:
consecutively imaging an optical code respectively using at least a first and a second imaging setting;

generating at least first and second sets of image data respectively corresponding to the first and second imaging settings;

evaluating at least one of the first and second sets of image data;

selecting at least one of the first and second sets of image data in accordance with the evaluation; and

decoding image data from the selected set of image data that corresponds to the optical code.

Applicants' Claim 14 recites:

A system for imaging an optical code comprising:

means for consecutively imaging an optical code respectively using at least a first and a second imaging setting;

means for generating at least first and second sets of image data respectively corresponding to the first and second imaging settings;

means for evaluating at least one of the first and second sets of image data;

means for selecting at least one of the first and second sets of image data in accordance with the evaluation; and

means for decoding image data from the selected set of image data that corresponds to the optical code.

Applicants' Claim 27 recites:

An optical code reading system comprising:

an imaging engine having a lens assembly and a photo sensor array for consecutively imaging an optical code located in a field of view of the imaging engine respectively using at least a first and a second imaging setting, and generating at least first and second sets of image data respectively corresponding to the first and second imaging settings;

processing means for evaluating at least one of the first and second sets of image data, and selecting at least one of the first and second sets of image data in accordance with the evaluation; and

processing means for decoding image data from the selected set of image data that corresponds to the optical code.

Applicants' Claim 31 recites:

An optical code reading system comprising:
an optical code reader comprising:
a lens assembly for focusing incident light;

a photo sensor array for sensing the focused incident light and generating image data corresponding to two different imaging settings; and

transmission means for transmitting the image data; and

a processor externally located from said optical code reader for receiving the image data corresponding to the two different imaging settings and processing the image data, including evaluating image data corresponding to at least one of the two image settings; selecting image data corresponding to one of the two different image settings in accordance with the evaluation and decoding image data from the selected image data that corresponds to the optical code.

Applicants' Claim 32 recites:

A method for imaging an optical code comprising the steps of:

consecutively imaging said optical code respectively using at least a first and a second imaging setting;

generating at least first and second sets of image data respectively corresponding to the first and second imaging settings; and

transmitting the first and second sets of image data to an external processor for processing of the image data, wherein the external processor processes the first and second sets of image data in accordance with a processing method comprising the steps of:

evaluating at least one of the first and second sets of image data;

selecting at least one of the first and second sets of image data in accordance with the evaluation; and

decoding image data from the selected set of image data that corresponds to the optical code.

Applicants' Claim 33 recites:

A computer readable medium storing programmable instructions capable of being executed by a processor for performing the steps of:

receiving at least first and second sets of image data corresponding to consecutive imaging of an optical code using respective at least first and second image settings;

evaluating at least one of the first and second sets of image data;

selecting at least one of the first and second sets of image data in accordance with the evaluation; and

decoding image data from the selected set of image data that corresponds to the optical code.

Applicants' Claim 34 recites:

A computer data signal embodied in a transmission medium for execution by at least one processor for processing an imaged optical code, the data signal comprising:

a code segment including instructions for receiving at least first and second sets of image data corresponding to consecutive imaging of an optical code using respective at least first and second image settings;

a code segment including instructions for evaluating at least one of the first and second sets of image data;

a code segment including instructions for selecting at least one of the first and second sets of image data in accordance with the evaluation; and

a code segment including instructions for decoding image data from the selected set of image data that corresponds to the optical code.

Bunte et al. does not disclose or suggest at least the emphasized limitations of Claims 1, 14, 27, 31, 32, 33 and 34. Bunte is directed to an apparatus and method for reading an optical code. The Bunte apparatus includes an illuminator set which may be configured to have multiple types of illuminators, a sensor assembly which may be configured to have multiple focusing capabilities and/or multiple sets of detectors for sensing reflected light. The reader further has a decode circuit which may be configured to have multiple processors (which may include a digital signal processor (DSP)) for running a decode routine set, which may be selectable from multiple decode routines sets. A read operation may be performed using a combination of devices and routines including an illuminator, a focusing capability, a set of detectors, a processor for decoding and a set of decode routines, each of which may be selectable if more than one choice is available on the particular reader in accordance with its present configuration. Several combinations may be available

Bunte et al. discloses at column 31, line 39 through column 32, line 22 and FIG. 23 a method for performing a read operation. A compatible combination of devices and routines is selected and a read operation including a decode attempt is performed. An evaluation is made if the decode attempt was successful. If the decode attempt was successful the decoded code is

used for further processing. Otherwise, a reattempt at the read operation and/or a read operation using another compatible combination of devices and routines is attempted. Bunte et al. performs an evaluation with regard to the success of a decode attempt and decides accordingly whether or not to select another combination of devices and routines for acquiring another set of image data.

Bunte also discloses at column 33, line 65 through column 34, line 48, a method using three compatible combinations of devices and routines in parallel, where the first combination is laser diode 2529 and the photodetector 2535; the second combination is diodes 2525 and photodetector array 2539; and the third combination is flash illuminator 2527 and the photodetector 2535. If a decode operation performed on data acquired using the first combination is successful, the second combination is not used. Otherwise the second combination is selected and image data using the second combination is acquired and stored. If a second decode operation performed on data acquired using the first combination is successful, the third combination is not used. Otherwise, the stored data is analyzed to see if the third combination is desirable (i.e., that an appropriate distance has been reached). If so, the third combination is selected and image data using the third combination is acquired.

Accordingly, an evaluation performed by Bunte includes either determining if a decode attempt was successful, or determining if it is appropriate to use a different combination of devices and routines with which to acquire an image. Bunte et al. does not disclose or suggest the steps or the means for at least "evaluating at least one of the first and second sets of image data; selecting at least one of the first and second sets of image data in accordance with the evaluation; and decoding image data from the selected set of image data that corresponds to the optical code" as recited by Applicants' Claims 1, 14, 27, 31, 32, 33 and 34. Accordingly,

withdrawal of the rejection under 35 U.S.C. §102(b) with respect to Claims 1, 14, 27, 31, 32, 33 and 34 and allowance of thereof are respectfully requested.

Dependent Claims 2-9 and 11-13; 15-22 and 24-26; and 28-30 depend from Claims 1, 14 and 27, respectively, and therefore include the limitations of Claims 1, 14 and 27. Accordingly, for at least the same reasons given for Claims 1, 14 and 27, Claims 2-9, 11-13, 15-22, 24-26 and 28-30 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) with respect to Claims 2-9, 11-13, 15-22, 24-26 and 28-30 and allowance thereof are respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-9, 11-22 and 24-34, are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicants' undersigned attorney at (631) 501-5706.

Respectfully submitted,

George Likourezos
Attorney for Applicants
Reg. No. 40,067

Mailing Address:
Carter, DeLuca, Farrell & Schmidt, LLP
445 Broad Hollow Road, Suite 225
Melville, New York 11747
631-501-5706
FAX: 631-501-3526